DOCUMENT RESUME

ED 352 914 HE 026 114

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TITLE Leadership Strategies To Improve Teaching and Learning. ASHE Annual Meeting Paper.
SPONS AGENCY Ford Foundation, New York, N.Y.
PUB DATE Oct 92
NOTE 28p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Minneapolis, MN, October 29-November 3, 1992).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Case Studies; College Administration; College Faculty; *Community Colleges; *Educational Quality; *Faculty College Relationship; *Institutional Environment; *Leadership; *Organizational Climate; Research; Teacher Behavior; Two Year Colleges
IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

This 4-year study of 12 community colleges examined the institutional policies and administrative practices that encouraged or discouraged effective faculty behaviors. The study focused on faculty and administrative subcultures and the learning environment that they help to create in these open-door institutions. The study found that different community colleges exhibit different cultures and that these cultures can be defined by a common set of structural variables. Institutional culture appeared to directly impact the educational environment and the level of effective teaching practices varied significantly with the type of culture in which teachers were employed. An institution's degree of success in providing quality teaching and learning experiences appeared to correlate with whether the college fell within an adversarial, faculty-dominated, administratively-dominated, or shared culture domain. Those community colleges which possessed shared cultures tended to create the highest quality learning environments. Based on these findings, suggestions are offered on ways in which institutional leaders can effect change in the learning environment within the three other cultural domains. Also noted is the relevance of total quality management approaches to organizational improvement. Contains 27 references. (GLR)

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by

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Marriott City Center, Minneapolis, Minnesota, October 29 - November 1, 1992. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

# Leadership Strategies to Improve Teaching and Learning

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Few will argue with the statement--teaching excellence that leads to successful student learning lies at the heart of quality undergraduate education. In fact, community colleges stake academic reputations on their ability to create learning environments, which foster both. But, with students who differ markedly from their four-year counterparts in preparation and socioeconomic status, how can community colleges succeed in providing quality learning environments? This paper reports the findings of a four-year study of community colleges, which attempted to answer this question (Richardson, 1992).

The original impetus for the study revolved around a desire to determine which community college faculty behaviors contribute to student success. These findings led to an inquiry into what community colleges do to promote and support these faculty behaviors. And finally, to the question: What role does the community college leader play in improving teaching and learning and sustaining a quality education environment?

Using case study and survey data, we show that different community colleges exhibit different cultures and that these cultures can be defined by a common set of structural variables. Further, we demonstrate that institutional culture directly impacts the environments in which teaching and learning take place and that the level of effective teaching practices varies significantly with the type of culture in which they are employed. That in fact, those community colleges, which possess shared cultures, tend to create the highest quality learning environments. Based on these findings, we then suggest ways in which institutional leaders can affect change in the learning environment.

## THE STUDY

The project, funded by the Ford Foundation, was planned around three phases of activity. In the first, a comprehensive inventory of observable faculty behaviors was developed from three sources: the Miami-Dade Teaching/Learning project (Miami-Dade Community College, 1988), field interviews conducted with community college administrators, faculty members and students from the Maricopa County (Arizona) Community College District (Elliott, 1992), and a review of the literature. Faculty behaviors were combined into a survey, Educational Goals and

Faculty Activities in the Community College. Factor analysis of the data from two pilot tests involving community colleges in Arizona, California, Florida, and Hawaii helped to refine the survey into 44 reliable and valid statements describing the range of professional activities that characterize the work of community college faculty members (Vangsnes, 1992).

In Phase 2, the survey was administered to a random, stratified, national sample of 52 community colleges. Institutions with high proportions of African American, Latino, and Native American students were over-sampled. Sixty-seven percent of the faculty members surveyed provided usable responses. Confirmatory factor analysis indicated five reliable categories of faculty behavior: exhibiting effective teaching, helping diversely prepared students participate and achieve, helping students transfer, participating in governance, and conducting classroom research and collaborating. There were significant differences across institutions in the levels of behaviors reported for each of these categories (Murphy, 1992).

During Phase 3, the focus of this paper, case studies were conducted in 12 community colleges, ten from the sample that completed the survey and two selected to improve geographic representation. In preparation for the case study site visits, institutions appointed campus research teams who followed a common protocol to collect information from colleagues about institutional policies or administrative practices that encouraged or discouraged effective faculty behaviors. The teams provided a key insider's perspective during site visits.

Procedures for conducting case studies and analyzing the results closely conformed to those suggested by Yin (1989) for multiple-case studies. The case study database included survey results, interviews with faculty members and administrators, institutional documents (including accreditation self-studies and evaluation team reports), collective bargaining agreements, and archival data. Case reports were written to integrate everything known about the institution and shared with representatives for a "member check" on accuracy (Lincoln and Guba, 1985, p.314-316). A single case was used to create an explanation of faculty behaviors in context. The explanation was then tested against each of the remaining cases and modified as necessary until as many of the differences among case study institutions as possible had been explained.

To preserve participant anonymity without compromising our methodology, fictitious names were assigned to institutions alphabetically according to the degree to which faculty and administrators described shared values focused on helping students achieve defined educational objectives. Administrators and faculty at Ashcroft, Bentley and Creston shared strong, well-defined values. Values at Norwich, Oxbow and Parkhill had been

shaped to a considerable degree by past or ongoing conflict. Institutions lying between these extremes varied not only in the extent to which administrators and faculty shared values, but also in the degree to which those values emphasized student achievement. Table 1 reports the characteristics of the case study institutions summarized in four categories to conceal identities.

TABLE 1

Characteristics of Case Study Institutions

| College | FT Faculty | | FTE Students | |
|---|---|---|---|---|
| | Number | % Minority | Number | % Minority |
| Ashcroft | | | | |
| Bentley | 83-262 | 10-15 | 1,300-9,900 | 10-15 |
| Creston | | | | |
| | | | | |
| Enfield | | | | |
| Fairview | 145-310 | 11-38 | 4,800-12,486 | 23-85 |
| Goshen | | | | |
| | | | | |
| Johnson | | | | |
| Kingston | 100-251 | 21-33 | 3,800-6,000 | 45-95 |
| Lakefield | | | | |
| | | | | |
| Norwich | | | | |
| Oxbow | 134-417 | 12-30 | 5,000-9,800 | 21-33 |
| Parkhill | | | | |

1. Only the ranges have been reported for each three-institution group to prevent identification of individual institutions.

## STUDY FINDINGS

### Organizational Cultures and Learning Environments

Organizational culture provided a useful starting point in the search for an explanation of the differences in behaviors faculty reported on the survey and during site visits. Culture is defined by the assumptions and beliefs shared by members of an organization (Kuh and Whitt, 1988). Culture develops over time among a group with an identifiable history as learned responses to the problems of maintaining internal cohesion and relating to

the external community. Because it can reduce anxiety, people cling to a culture even if it becomes dysfunctional in its relationship to environmental opportunities and constraints (Schein, 1985). In other words, conceptually, culture is based on social construction; participants constantly interpret and create organizational reality (Senge, 1990). In community colleges, this reality translates into environments in which teachers teach and students learn.

Within the cultures of complex organizations, subcultures exist. Their views and values, sometimes compatible often times not, shape their institution. In this paper, we focus specifically on faculty and administrative subcultures and the learning environment that they help to create because, in an open-door institution, instructional quality cannot be altered by changing the student mix through admissions policy. To this end, the cultures and subcultures of the case study institutions provided important clues about institutional circumstances that either encouraged effective faculty behaviors or detracted from them. Case study synopses illustrate this point.

Case Study Community College Cultures

Ashcroft: At Ashcroft, faculty and administrators characterized the environment as "culture--helping people where they are. We are a family." Anecdotes defined the culture, illustrated common experience and reenforced the belief that Ashcroft places great emphasis on innovation, creativity, and risk-taking. Administrators, board and faculty placed prime importance on the teaching and learning process in an environment where faculty influence balanced that of the administration. Administrators actively sought out, valued and used faculty input. For instance, a representative faculty senate had the responsibility, "to review, recommend and initiate policies to further the best interests of Ashcroft." In the same vein, an administrator commented, "Reciprocal nudging is our theme. The faculty nudge us just as we nudge them back." There is a "burning desire to do better."

Faculty responsibilities were carefully spelled out in job descriptions according to rank. For instructors the emphasis was on teaching, being available outside of the class to work with students, and participation in scheduled department, division, and college activities. Assistant professors added the responsibilities of course revision, academic advising, and some modest leadership activities. As faculty members progressed through the ranks, their responsibilities became both broader and more leadership-oriented.

Of the case study institutions, Ashcroft had the best developed arrangements for merit, and faculty exercised a strong influence in establishing or changing evaluation procedures.

Ashcroft administrators described the purpose of merit as the reenforcement of behaviors the institution considered desirable and believed that most institutions make the mistake of limiting merit to too small a number of faculty. More than half of the faculty at Ashcroft received merit awards in any given year. Practices such as merit, deemed good for the faculty, were also applied to administrators.

Bentley: Despite problems with vertical communication, Bentley is a closely knit community that attaches more importance to relationships among people than administrative structure or college policy. Administrators and faculty shared such values as commitment to program quality, the development of student competencies, and close linkages to the community. A department chair, referring to the faculty, said, "We have a bunch of high achievers who really like the self-recognition of achievement." Another described faculty members as "feeding on the positive reputation for excellent programs." A faculty member explained how the peer relationships support values, "The pressure here is if you are not doing your job, your fellow faculty members will be more difficult to get along with." At Bentley, faculty worked hard because the culture carried that expectation and they valued the culture as a "good place to work."

Creston: The way Creston works is somewhat mysterious, even to those who have been there for awhile. Most of the rules and procedures are not written down. Rituals, activities and practices, however, communicate a vivid sense of institutional culture and an image of a college that is a cut above average. Creston values its faculty and encourages the pursuit of ideas (especially those of individual faculty members). Faculty were described as having a "strong, almost crusading, commitment to being there for students and a quality education." Extensive faculty development opportunities at Creston dovetailed with its institutional priorities. Although the process for taking advantage of these opportunities was informal and voluntary, Creston's culture provided recognition and celebration for those who chose to participate.

At Creston, however, responding to extensive direction from the district office without stifling faculty initiative and enthusiasm was a task of no mean proportion. As one example, the creation and revision of curriculum, while very much faculty-based, relied on curriculum committees organized by discipline in a district structure. Administrators and faculty members alike described the cumbersome process as "a wonderful system for ensuring that nothing changes very fast." Division chairs described spending two and a half days a week in district meetings before doing any business on campus. Creston had a positive and nurturing environment in part because its administrators devoted considerable energy to shielding the college from unnecessary intrusions by the district.

Enfield: At Enfield, faculty used the term "benign neglect" to describe the management environment as they experienced it. The environment they described appeared neither threatening nor challenging. Faculty and administrators lived in separate but non-conflicting worlds. One faculty member said, "Administrators have not mobilized the faculty. They do not associate with them outside the institutional context."

At Enfield, a faculty association advanced policy recommendations to a president's cabinet, which might or might not advance them to the board. From a faculty perspective, there were "umpteen faculty committees," some more active than others. However, opinions about the effectiveness of committees and the governance process varied. Faculty said that something happened if the right person chaired the committee; otherwise recommendations simply disappeared. Enfield made extensive use of the charrette process to involve faculty in discussing problems. A faculty noted: "Charrettes are a lot of fun to go to. They charge you up. All those wonderful ideas. Then you leave and `boff,' nothing happens. They should be renamed one-day retreats."

Enfield's culture placed prime responsibility for improving student learning on faculty. Although many felt disenfranchised and unhappy, faculty continue to do a good job of teaching students and caring for them. For example, Enfield faculty working collaboratively with the faculty of a local university, developed their English curriculum, a summer bridge program for students contemplating bachelor's degrees in math, science or engineering, an innovative approach to science instruction and an interdisciplinary core curriculum in general studies.

However, a comment by a faculty member regarding the absence of linkages between evaluation and rewards revealed another side to Enfield. "Once a faculty member has tenure and commits office hours at the beginning of the semester, he can kick back and relax." The comment produced laughter. Other faculty members were quick to add that while this was possible, most would not engage in that kind of behavior. They argued that under such circumstances it was "up to the individual to be self-sustaining."

Fairview: Only Fairview, among the higher-performing institutions, had a collective bargaining agreement. Beyond specifying curriculum development procedures, however, the contract made little reference to faculty involvement in governance or academic structure. Faculty members at Fairview understand that their students require more time to learn, and so they provide that time through the way they teach their courses and through the way they sequence their courses. They believe that when students finish, they are prepared to continue at transfer institutions. The primary focus of Fairview's

evaluation system on excellence in teaching promoted this type of behavior.

At Fairview, faculty who did not meet the 30-hour teaching requirement during the two semesters of the regular academic year were assigned teaching responsibilities during the first summer session to make up the difference. While faculty were allowed to teach up to 12 contact hours per year as an overload, the practice was discouraged, and the compensation rate was so low that few faculty did it. Under their collective bargaining agreement, faculty were responsible for performing student advising and assisting during registration. They were strongly encouraged, but not required, to be present at college-sponsored functions and activities.

Goshen: Goshen faculty advise new colleagues--"Teaching is paramount and research interest nonexistent. The responsibility here is to be able to explain things in ways that students can understand and master."

There was substantial consensus among faculty and administrators at Goshen about the high quality of current faculty, their sources of satisfaction, and what it takes to be effective. A chair of one of the larger departments described the culture as one with "expectations about how faculty members will work with students...[that most follow]...both as a matter of professional pride and because they value their relationships with fellow faculty." Faculty prize working with students and are very available to them. But not all comments were positive. One faculty member described the environment as "things you avoid rather than things you work toward."

Goshen had several campuses but operated as one with faculty members organized in districtwide divisions. It benefitted from a district administration with a history of avoiding micro-management. District administrators evidenced considerable willingness to live with faculty decisions as long as they did not create chaos. They were equally reluctant to impose solutions on faculty from outside. The single college approach, unusual for a district as large as Goshen, along with a very sparse administrative structure on each of the campuses, prevented the endless meetings that characterized some similar sized multicampus districts. The district planning process at Goshen coordinated and enhanced professional development. Faculty members were pulled out of departments to participate in districtwide planning, issue development and program implementation. There were no complaints about communication, and the faculty focus was clearly on problem-solving.

Johnson: Faculty members at Johnson described "lots of enthusiasm and lots of caring among many faculty," and added, "Some faculty have a passion for doing what they do. They really project an

attitude of caring." They also said, "About two-thirds teach, don't keep office hours, and bug out as soon as they can." Another added, "Over time people have grown less enthusiastic. They don't try new ideas. They don't even apply technology or the knowledge they know."

The weight of structure and processes in the multi-college district to which Johnson belonged was increased by a hands-on, top-down administrative style. An administrator at Johnson described how a new evaluation procedure evolved: "The district has a shared governance committee involving about 8000 people, a shared governance steering committee with about 2000 people, and a subcommittee of the shared governance steering committee which deals with evaluation and involves about 1500 people." A senior administrator at Johnson added, "Symptomatically, multi-campus districts have enormous trouble getting anything done."

Kingston: At Kingston many agreed that the faculty culture was strong and not easily influenced. As one administrator noted, "Boat rockers are not highly appreciated." From a faculty perspective, the system does not allow for innovation and the entire administrative bureaucracy stifles innovation before it happens. The process of setting priorities at the campus was described by one administrator as "waiting to see if the train leaves the station headed in the right direction and if it does, to get on board."

Faculty members at Kingston were organized into six divisions. While division chairpersons were defined as key educational leaders in district documents, faculty members believed them to be "...pseudo-administrators who shuffle papers. No important decisions occur at that level." Faculty were uniformly unenthusiastic about the division structure.

While Kingston was not involved in collective bargaining, there existed a strong, representative academic senate which served as a regular channel of communication between the faculty and the administration. The charge to the senate was sufficiently broad to encompass any topic either faculty or administrators chose to bring before it. In many ways the senate resembled the marriage of an academic senate to an in-house union. Kingston possessed neither a systematic program for professional development nor any form of recognition (beyond movement to administration) for those who sought out professional development opportunities on their own.

Lakefield: Faculty members at Lakefield care about students and give them attention they would not receive elsewhere. The culture encourages a strong sense of faculty ownership of the educational program and the courses they teach. There is a core of committed faculty who are willing to confront the inertia of a large system and one of the oldest and strongest faculty unions

in the country to achieve change consistent with the mission of the college. This small, but hardy, band benefits from administrators who believe their most important strategy is to constantly encourage and support new ideas and to find resources for implementation.

The evaluation process at Lakefield and its link to a competitive promotion process was similar to the one at Fairview, but it emphasized significantly different values. While teaching was important, the criteria for Lakefield emphasized activities or outcomes that were quantifiable. As a faculty member noted, "The pressure is always to do things other than teaching." While faculty members criticized the mismatch between the values emphasized in evaluation and promotion and the work required by their students, they nonetheless emphasized strongly that a promotion system with mismatched values was still better than no promotion system at all.

Norwich: The collective bargaining agreement at Norwich was quite comprehensive, incorporating a very liberal interpretation of terms and conditions of appointment. The purpose and membership of the academic senate, for example, is included as an appendix to the agreement. Many of the contract provisions seemed to be attempts to insulate faculty from the instability that has characterized leadership at the top for the past two decades. "Beyond the classroom," explained one administrator, "there are only two ways of getting faculty members to do things at Norwich. You can use involvement in committee or task force activity as a strategy or you can pay them." Because faculty were expected to limit their involvement to classroom teaching and related student interaction, most did--a response that was reenforced by a lack of administrative interest in or support of faculty ideas.

Faculty members were, however, involved with student recruitment. On a regular basis, they conducted career opportunity presentations to interested high school students, made presentations as a part of the campus tour program and participated in a telephone campaign series. Interviews also confirmed heavy faculty participation the student assessment system. An administrator noted: "They set standards and own the process."

Lack of consistent leadership from the top has made it difficult to define and pursue priorities. Departments and divisions were fiefdoms, where individual work went forward, often at a very high level, but where little attempt was made to coordinate or communicate across unit boundaries. In essence, contract negotiators have succeeded in insulating faculty from administrative leadership.

Oxbow: At Oxbow the tensions caused by conflicting philosophies and practices among administrators led to a declining number of

committed faculty. One commented, "The percent of faculty opting out of active involvement is growing." A second faculty member continued the same theme: "Thirty percent of the faculty have stacked arms. How long do you beat them? They are getting angry." In the face of reduced resources, the institution continued to emphasize enrollment growth. A senior administrator described the strategy, "...more and more of our teaching will be done by part-timers; part-timers are as good in the classrooms as full-timers; however, they don't do the advising or committee work. As long as we have a core of full-time faculty, at least a third of whom will do the work, we are not worried about the percentage of instruction done by part-timers."

Oxbow reported the most elaborate governance structure among the study institutions. The purpose of the All College Council and standing committees at Oxbow was "to advise on executive and operating policies both before they are adopted and after implementation." Some administrators saw the council as a devise to improve communication and involve faculty in decision making; others viewed it as a strategy for diffusing conflict.

Parkhill: Parkhill is, to a remarkable extent, faculty-driven. A faculty member explained, "...faculty have been here longer than administrators, we have seen a lot of them come and go, and we're a lot smarter than they are. We do work with administrators, and we flex." An extremely comprehensive collective bargaining agreement left administrators with few opportunities for encouraging faculty to move beyond minimum standards. Parkhill faculty met classes, posted office hours, helped staff governance committees, and hopefully met deadlines. But, for practical purposes, there was no accountability to administrators. Senior faculty received released time to provide leadership in improving student achievement, but the efforts of individual faculty and the supportive behaviors of administration were insufficient to overcome the numbers of faculty who exercised their prerogatives to remain unengaged. Parkhill recently placed increased emphasis on professional development. However, there was little evidence of widespread faculty participation.

Like Goshen, Parkhill described itself as a single college operating in several locations. However, each campus had its own administrative structure, and there was a well-defined central district staff. Relationships between central district staff and campus administrators had deliberately been left ambiguous, as were arrangements describing the relationships between academic units common to more than a single campus.

## Insights into Faculty Behaviors

Because the five categories produced by factor analysis of the survey data failed to fully capture the richness and diversity of student-related faculty behaviors described during

the site visits, an expanded model, which offered eight categories, was used (Richardson and Skinner, 1991). These categories included: outreach/student recruitment (O&SR), mentoring/advising (M/A), campus climate (CC), academic support/learning assistance (ASLA), student assessment (SA), good teaching practices (GTP), adaptive instruction (AI), and emphasis on achievement (EA).

Where faculty members consistently reported higher levels of involvement in the eight behavioral categories, institutions had a shared culture or at least a culture where faculty and administrative values did not conflict. In contrast, institutions where faculty members reported lower levels of involvement in the eight behavioral categories were much more likely to exhibit cultures that had grown out of conflict. While all institutions were concerned about student achievement, lower-ranked colleges focused more on maintaining the boundaries between administrative and faculty influence. Table 2 displays the rankings on each of the eight categories for the ten case study institutions that also participated in the survey phase of the overall study.

TABLE 2

Survey of Faculty Behaviors: Institutional Ranks

| College | O&SR | M/A | ASLA | CC | SA | GTP | AI | EA |
|---|---|---|---|---|---|---|---|---|
| Bentley | 1 | 1 | 1 | 1 | 1 | 4 | 2 | 4 |
| Creston | 7 | 4 | 5 | 4 | 7 | 6 | 8 | 5 |
| Enfield | 2 | 6 | 2 | 5 | 4 | 3 | 1 | 1 |
| Fairview | 5 | 2 | 7 | 6 | 6 | 2 | 3 | 3 |
| Goshen | 6 | 8 | 3 | 3 | 3 | 1 | 5 | 2 |
| Kingston | 4 | 7 | 9 | 7 | 5 | 9 | 4 | 7 |
| Lakefield | 10 | 9 | 4 | 2 | 10 | 5 | 6 | 8 |
| Norwich | 3 | 10 | 6 | 8 | 2 | 7 | 7 | 6 |
| Oxbow | 9 | 5 | 8 | 10 | 8 | 10 | 9 | 10 |
| Parkhill | 8 | 3 | 10 | 9 | 9 | 8 | 10 | 9 |

1. Survey information was unavailable for Ashcroft and Johnson.

Differences in the approaches that institutions and their leaders took toward dealing with such structural issues as working conditions and role expectations, evaluation systems and rewards, faculty and organizational structure, governance arrangements and opportunities for professional development, began to explain the apparent inconsistencies in the ties between supportive cultures and superior performance. Creston is a case

in point--an extremely supportive culture did not automatically result in high levels of the most desirable faculty behaviors (See Table 2).

Not surprisingly, those institutions that expected more of their faculty got more. Institutions with higher-performing faculty differed from their counterparts not only in the amount of work they expected from faculty members but also in the way faculty role was defined. By the same token, most of the case study institutions did not link evaluation systems to either rank and promotion systems or merit. Those that did presented markedly more challenging environments for faculty than those that did not.

Almost all of the case study institutions used some form of combined department and division structure, but the role and importance of the department varied significantly. In colleges with higher-performing faculty, departments were valued as places where faculty gained leadership experience and where innovative ideas were incubated. Among colleges with lower-performing faculty, departments were tolerated or served as bastions of faculty autonomy virtually impervious to administrative influence. The amount of time available to department and divisional administrators was also a key variable.

Seven of the colleges were part of districts that supervised more than a single, comprehensive campus. The districts varied substantially in conceptual approach, ranging from a single college with multiple locations to arrangements where each college, in theory, operated as an autonomous unit. In practice, most district structures were perceived as controlling rather than coordinating or facilitating. The district influence on institutional quality appeared to vary inversely with the degree of standardization district administrators sought to impose.

Among institutions with higher-performing faculty members, a system of joint governance, which was encouraged by specific institutional arrangements, ensured that neither administrators nor faculty could secure their objectives by acting independently. In institutions with lower-performing faculty members, comprehensive collective bargaining agreements or board policies narrowly defined faculty role, protected those who opted out of all responsibilities other than meeting classes, and permitted senior faculty or administrative leaders unilaterally to prevent change with which they disagreed.

Institutions with higher-performing faculty (with the exception of Fairview, where resources were extremely constrained) provided more extensive opportunities for professional development and related these opportunities more systematically to institutional priorities. In institutions with lower-performing faculty members, it was sometimes difficult to

identify priorities, and participation in professional development was largely a matter of individual choice. In some institutions with lower-performing faculty members, administrators admitted that they had largely given up attempts to change existing levels of performance, pegging their hopes for renewal on the replacement of existing faculty when they retired.

## DISCUSSION

### Delineating the Aspects of Influences

The emerging pattern, to which the previous summary of study findings points, is one of organizational environments defined by the relative strength of faculty and administrative influences and the degree to which the values of these two subcultures were congruent. Further, for the twelve case study community colleges, an institution's degree of success in providing quality teaching and learning experiences seems to correlate with whether the colleges falls within an adversarial, faculty-dominated, administratively-dominated or a shared culture domain.

Adversarial Domain: In the adversarial domain, discontent simmers below the surface and conflict erupts on a regular basis. Neither faculty nor administrators can muster sufficient levels of influence to move the institution beyond the conflict. Values differ. Each group spends considerable amounts of energy keeping the other in line. Conflict resolution sustains the organization and allows it to continue functioning.

Take Oxbow, for instance, faculty and administrators occupied separate camps with much of their energy devoted to "diffusing conflict." Oxbow faculty contested administrative domination through a governance structure accepted reluctantly by its president to reduce dissonance. At Oxbow the tensions produced by differing philosophies and practices directly influenced faculty-student interactions.

While Oxbow identified student achievement as an important objective, conflict, or the arrangements developed to prevent conflict, affected the ability of its leaders to pursue student achievement through changes that would alter the expectations held for faculty. Competing values and procedural safeguards produced an environment where faculty members were significantly less likely to report engaging in success-related behaviors. In cases like Oxbow, blame for the failure to reach the desired levels of student achievement most often falls to the student.

Faculty-dominated Domain: In the faculty-dominated domain, faculty preference for stability and continuity produce cumbersome governance procedures and administrative structures often embedded in collective bargaining agreements. This gives rise to a decision environment in which administrative views are

unlikely to prevail unless first endorsed by faculty leaders. Faculty remain well insulated from efforts to change the status quo. The environment, while non-threatening, stifles initiative and creativity.

For example, an extremely comprehensive collective bargaining agreement at Parkhill defined faculty responsibilities, specified academic organization, and described in detail the procedures through which faculty participated in decision-making. Until very recently, it was not clear that Parkhill had any evaluation system at all. Promotion was virtually automatic for faculty who met minimum academic and length of service requirements. Even under a newly implemented evaluation system, both the re-appointment process and the promotion process were essentially faculty-controlled, with little provision for administrative input except in acquiescing or rejecting a recommendation. Promotion remained automatic. Although Parkhill administrators and faculty described a supportive environment for faculty ideas, administrators saw few opportunities for encouraging faculty to move beyond minimum standards. One faculty member confirmed this observation by noting, "If you don't meet them (minimum standards), there is a sanction; but if you exceed them, there is no mechanism for recognizing excellence."

Pressures to protect the existing environment and an inordinate dependence on negotiation and consensus building (in the form of collective bargaining) as viable paths to decision making restrict efforts to improve the teaching and learning experience. Complex administrative and governance structures substitute for shared values and mutual accommodation. Little consensus about priorities leads to blaming the students and administrators for the lack of success in optimizing the student's education experience. The overall experience is neither particularly exciting and creative nor consistently bad.

Administratively-dominated Domain: In the administratively-dominated domain, non-responsiveness to faculty concerns typifies a top-down-structured hierarchy. Administrators seldom seek faculty input and, when they do, systematically ignore it. What the administrator sees as important determines what gets done, when it is done and how it is done. Faculty roles are narrowly defined. Faculty distrust institutional processes and resist administratively defined values and priorities. Collective bargaining agreements or board policies that require faculty consultation for modification prevent conflict at the cost of limiting possibilities for organizational change.

The faculty-administrative relationship, complicated by a rift between top and middle administrators, at Johnson typified this domain. "People are turned off because nothing happens to recommendations," reflected faculty dissatisfaction with

administration. Someone else estimated, "Half of the faculty may have dropped out." A new faculty member said, "I came in with great enthusiasm. A colleague told me I should go home. Now I don't stay until 5:00 or 6:00 anymore." Faculty are organized into departments within divisions, but no effective way of linking faculty structure and division priorities exists. Faculty perceived that administrators do not like the idea of departments, so the strategy has been to keep them as weak as possible. Johnson's hands-on, top-down administrative style exacerbated the procedural complexities caused by the weight of structure and processes in the multi-college district to which it belonged. The curriculum process began on a campus "if it begins at all," said a faculty member, and involved coordination across departments, across campuses, and through a labyrinth of committees.

While expectations may be high, attempts at improving the learning environment through administratively imposed changes often meet with only marginal success; and administrators assign responsibility for any perceived failure to faculty.

Shared Culture Domain: The shared culture domain is characterized by an environment where administrative and faculty influences are balanced. Both groups are encouraged to participate in efforts to define priorities and plan for their achievement. Thus, balanced power in a shared culture leads to joint responsibility and authority. Together, faculty and administrators build a common history based on long-enduring assumptions, values and beliefs that are communicated through the organization's rituals, activities and practice. Creativity, innovation and risk-taking play key roles. Efforts to relate faculty and administrative behavior to well articulated institutional priorities promote a supportive, family-like atmosphere.

Ashcroft exemplified this type of culture. A united pursuit of excellence leads to the creation of an environment where good ideas emerge and can be acted upon. Faculty have an exceptionally well-developed sense of the expectations for a faculty member; and the institutional reward system clearly supports this set of expectations, which includes taking on leadership roles such as serving on committees, as leaders of task forces and within the governance structure. Ashcroft designed its approach to evaluation, recognition and professional development so that they build on each other in mutually supportive ways that undergird these expectations.

In shared culture domains, administrators create and defend cultures where faculty input is sought out, valued and used. Collegiality abounds. Priorities are clearly defined and the focus is on teaching and learning. Administrators support rituals and tell stories that illustrate and reinforce the attitudes and beliefs that define culture. Behaviors valued in

faculty are modeled by administrators. Faculty functioning within a shared culture are most likely to display high levels of student-success related behaviors. As a result, the perceived quality of the learning environment is enhanced.

## Defining the Role of Leadership

What role does leadership play? Leadership involves inducing followers to act on jointly held aspirations and expectations, which are based on mutually accepted values and motivations (Phillips, 1992). When Kanter (1989, p.344) describes leadership as ensuring that people are able to concentrate on contributing what they do best in a company itself fully focused on maximizing its core business, she could just as well have been speaking about higher education. Certainly, in community colleges where the primary institutional mission is teaching, the analogy becomes self-evident.

For colleges to take seriously the importance of superior teaching, leaders must first champion the notion and then willingly undertake the painstakingly long process toward its recognition (Seldin, 1990). Change can be initiated by the administration, but enduring change requires leadership from the faculty. In other words, administrators are not the instruments of change but the agents of change--the catalysts who bring about and guide change by exerting quiet and subtle influence on a day-to-day basis (Phillips, 1992). A leader asks--Can we do it better? Without leadership, organizations stumble in their attempts to adapt to changing environmental conditions (Schein, 1985).

Still the question remains: What is it that education leaders do that improves learning conditions for students? Because each period in the life of a community college is unique and particular circumstances govern the actions in which it engages, we do not offer a laundry list of specific leadership strategies for improving teaching and learning. Rather, through the use of literature and illustrative examples of leadership behavior within the case study community colleges, we suggest an overriding strategic philosophy that can guide leaders in their attempts to aid their institutions in building time-specific strategies for change.

Within Shared Cultures: Evidence suggests that the institutions best equipped to pursue quality are those which have shared cultures. The leaders of two case study colleges clearly exhibit similar fundamental philosophies which are designed both to nurture their institutions' cultures and to promote ongoing quality learning environments.

In the case of Ashcroft, the leadership has a long history of consistently fostering a collegial and supportive climate

where the message sent says, "People here are professionals." Open communication and trust sustain creativity. Administrators genuinely believe that all employees of the college have good ideas and that they should have the opportunity to contribute to the development of college objectives. To gain the flexibility needed in the shared decision making process, administrators listen six years out, pick items that are really important four years out and decide what to do in order of priority when they develop a budget two years out. That way when someone has an idea and the time is right, "We don't have to say--you didn't budget for it, so we have to wait a year to do it."

Goshen is a community college in which new leadership has begun building on commonly held values centered on teaching excellence, student achievement and the provision of a quality learning environment. In sharp contrast to past leaders, the current provost was described as forward-looking and risk-taking, a person who delegates very well, has vision and has confidence in the faculty. He believes that most of his work consists of raising the right questions. He avoids behavior that might be perceived as "controlling," and emphasizes--"educational leaders need to tell people what they believe in and why they believe it." His leadership provides faculty with practice in directing actions toward the achievement of important outcomes and in being evaluated on the basis of their product. In other words, it allows for faculty ownership of the educational program while providing a sufficient sense of direction and structure. For instance, as a part of his strategy for helping department chairs understand what is important, he asks them to annually respond to what he terms "pulse points" (institutional priorities such as retention, articulation, faculty working conditions for a specific year). The behavior of the provost on a day-to-day basis models the behavior he expects from faculty. "If you say teaching is important, you ought to do some once in awhile. I teach one of the student success classes." To add credence to the emphasis he places on faculty excellence, he visits classes (over 40 in the past year). From the provost's perspective, it's important to convince faculty that it is their college and that what goes on in class is really important.

Instead of focusing on quality standards pegged relatively to doing better than others, these leaders challenge their institutions to meet the highest standards. Direction, not directives, drives collaborative efforts to maximize student educational experience and build synergistic behaviors into the educational system. Cooperation flourishes on a foundation of shared experience and values. Belief in a shared vision and a joint stake in the eventual education outcomes displaces faculty-administrative territorialism (Kanter, 1989). Leaders view providing quality as a continuously dynamic process that demands constant attention, periodic evaluation and systematic institutional adjustment. In other words, these leaders:

--Empower others by clarifying values and providing the vision that guides organizational behavior. Power in the form of control is not the issue, influence is (Astin and Leland, 1991).

--Share the vision and its meaning for the organization with others through clear communication, which includes a willingness to listen.

--Build seeds of understanding, identity and commitment into the very processes which create organizational strategies (Quinn, Mintzberg and James, p.678).

--Model the behavior he/she wants to see by building trust, through honesty and integrity, and confidence through respect.

--Set high expectations for him/herself and for those around him. That is, expect good performance, recognize and reward excellence, and balance desires for individual achievement with the cooperative effort of all.

--Create an atmosphere that encourages risk-taking and recognize mistakes and failures as pathways to success (Cornesky et al, 1990, p.5).

--Search for synergies that not only add value but multiple it (Kanter, 1989).

--Provide faculty, staff and administrators with the tools needed for self-leadership through professional development, training and education, and feedback. And lead others to lead themselves (Manz and Sims, 1989).

--Encourage continuous, incremental improvement and innovation by promoting divergent thinking that is grounded in the interdependence of shared responsibility and authority.

Such strategies sound straightforward enough, but few institutions possess the one criterion essential for their successful implementation--a shared culture. Even colleges, which possess a shared culture may not reach their true potential.

For instance, Creston exhibits a strong shared culture that espouses providing a quality learning environment for its students. But, ample evidence suggests that faculty confine their efforts to the classroom. Most faculty appear to be paid for assuming collegewide responsibilities and even then do not necessarily appear at the meetings of committees to which they have been appointed. Creston clearly values its faculty and is

proud of their commitment and accomplishments, but an administration that protects its faculty from district level interference seems to perpetuate an environment where faculty feel comfortable and disinclined toward behaviors that could enhance the quality of the learning environment. Together, administrators and faculty sustain an environment that may be ill equipped to meet the challenges presented by an increasingly diverse student population.

In Creston's case, the mission of the institution clearly focuses on providing a quality education for its students. However, external pressures not only seem to impact the way faculty and administrators go about their business but to blur the institutional vision of what it wants to create (a high quality learning environment). Literature suggests that Creston's leaders may need to lead their organization toward a reexamination of institutional core values and a deliberate reinvigoration of an already articulated vision. A vision of what "we want to create" that underscores the "why" of an institution's existence (the mission) cannot be fully realized until its core values dictate that the institution (and its members) act in ways, which unequivocally support that mission and vision (Senge, 1990).

**Leadership Strategies to Move an Institution Toward Change**

By the same token, leaders of institutions with adversarial, faculty-dominated or administratively-dominated environments can not simply superimpose a made-to-order set of strategies upon their respective institutions but must first address a fundamental prerequisite concern. How does a community college leader move his/her organization toward a shared culture?

Within Adversarial Domains: In the institution mired in adversarial relationships between faculty and administrators, the challenge becomes viewing conflict as an opportunity for change and not as a barrier.

Historically, Norwich has operated in an arena of conflict where faculty have been hostile toward administrators. At the time of the site visit, Norwich had entered into a period of renewal spurred on by a new president and a wide recognition that changes in demographics required a response across the institution. Traditionally, providing released time and paying faculty extra for such assignments as advising appeared to be the major mechanisms employed to gain support for administrative priorities and faculty involvement outside the classroom. There was little sense that administrators sought out and supported faculty ideas.

However, the new president has expressed a commitment to improved communication with administrators and to working with

the faculty senate in order to gain faculty input. This relatively new academic senate functions as an advisory board to the president. Coupled with a committee structure, it may provide a neutral ground where faculty and administrators can build consensus on issues related to teaching, learning and professional activities. While Norwich has looked at students and what is needed to meet their needs, the same attention has not been paid to what is needed to help faculty adjust to increasing diversity. Faculty and administrators agreed about the need for a mission statement and incentive system that addresses the teaching and learning process, but at the time of the site visit, no collegewide plan that articulated priorities and tied them to expectations for faculty existed.

Leaders, who find situations like the one at Norwich, must develop a non-judgmental, trusting atmosphere where faculty, staff and administrators actively promote changes that challenge the existing conflict environment and create a culture that facilitates their acceptance (Mintzberg, 1989, p.295). This type of revitalization takes time, must be carefully thought out and incrementally implemented. Building a history of successes and an air of concern become prime responsibilities of leadership. In this environment, small changes that build toward larger environmental shifts must be identified. The leader initiates the process by selecting a problem, substantiating its existence and analyzing the organization's assumptions which underlie it. He/she then presents the facts that document its existence and works with faculty and administrators to explore alternatives, searching out the strengths and weaknesses of each. They jointly arrive at an action agreement that defines goals, designs events to reach these goals and determines the sequencing and timing of these events (Cornesky et al, 1990, pp.70-71). Open lines of communication ensure that organization members know why an action is being taken and what is expected of them.

Within Faculty-dominated Domains: At Parkhill, expectations are governed for the most part by collective bargaining agreements and remain relatively modest. In some respects, contractual terminology holds the college president more closely accountable than individual faculty members. The president's oblique approach to influencing faculty behavior reflects this arrangement. He has limited formal interaction with faculty but encourages a stronger sense of collegiality at the campus level. For instance, the effort to involve faculty and to build close relationships between the functional areas of the college is pervasive.

Both administrators and faculty regard strong faculty involvement as an asset. Faculty note, "The president has a lot of respect for faculty opinion. He listens very carefully...." He builds enthusiasm by encouraging collegiality. The president's remarks, however, emphasized a continued need to

overcome deficiencies related to the teaching and learning environment, to encourage greater faculty collaboration and to improve student outcomes. The extent to which the institution relies on faculty leadership to carry out its initiatives for improvement is in itself a form of professional revitalization that seems to be a move toward a shared culture. Recently, the institution has embraced a more strategic approach to planning. The 1990 self-study reports the development of a shared vision which calls all segments of college community to be active participants in moving the institution toward an environment where academic achievement and social development are equally valued. However, because of the recency of this effort, it has yet to be translated into action.

In essence, an administrative leader in a faculty-dominated college, such as Parkhill, attempts to increase the defined leadership roles within the institution through a process of renegotiation and repositioning. The object is to gain the emotional involvement of faculty by building coalitions where people can work within a group to derive a jointly supported set of objectives (Spanbauer, 1987; Whetten, 1984). A leader intent on organizational change assesses the present organizational culture, determines where the organization should be and articulates a mission. He or she identifies the problem and strives for consensus among the faculty and administrators on its definition. Next, the problem must be incrementally redefined. Here, faculty acknowledgement of the need for action might hinge on the leader's ability to convince faculty that improved administrative effectiveness is really the desired result. The leader provides training, resources and support, but delegates the details of implementation. Once the solution is in place, he/she evaluates and redefines the process (Moomaw, 1984). An administrator's ability to identify the problem and evaluate its remedy may represent the most crucial elements of successful realignment.

Within Administratively-dominated Domains: When a new president arrived at Johnson Community College, he was told "It is important that new faculty (and administrators) learn the institutional climate and respect its history." Prior to his arrival, Johnson's entrenched administration was very much committed to preserving the "administrative" status quo. Administrators clearly expected faculty to be responsible for what went on in the classroom. Many faculty responded enthusiastically (especially the younger, newer ones). Others, disenchanted with the system, remained less involved. "People are turned off because nothing happens to recommendations." Another faculty member pointed to a deeper problem, "Johnson does not look at people as people...ask them what they need and provide it for them."

A repeated theme emphasized an unwillingness to support innovation and take risks--"You have to prove that something will succeed before you get a chance to try it," and alluded to deeper bureaucratic and process problems. Poor communications and a feeling that "We're not appreciated" signaled to faculty a lack of interest in improving instruction. Faculty resented administrative willingness to take credit for the things that faculty members did. In response to a willing faculty and a less enthusiastic administration, the new president has increased both faculty visibility and their emerging role in the governance and planning processes. Faculty participation is becoming more of an expectation and viewed as part of the overall process for achieving a quality environment. At some levels, this strategy seems to be working. One faculty member commented, "The president doesn't lead by setting out broad mandates...he leads through a subtle process." However, increased faculty involvement caused administrative resentment and a feeling of disenfranchisement. To address these concerns, the president suggested a manager's council, which has so far been resisted. As the planning process evolves, it will attempt to balance the influence of the faculty and that of the administration.

Evidence suggests that shared responsibility is a central ingredient in a shared culture. By the same token, it points to the difficulty an institutional leader may face when confronted with an administratively-dominated culture. Where the faculty-dominated environment might foster a "we" mentality among faculty and a tendency to disregard administrators as paper shuffling nuisances, an administratively-dominated environment cultivates a superior-subordinate facade that perpetuates active resistance to change. Moving an institution into a shared culture requires a willingness on the part of administrators to relinquish their stranglehold on authority in such a way as to encourage faculty to actively participate in and accept joint responsibility for institutional decision making. Strategic planning may provide a viable avenue through which this process can begin. It is a deliberate and conscious articulation of a direction (Kanter, 1989). While institutional leaders clearly instigate strategic planning initiatives, success comes only with concerted effort from those directly involved in providing the educational experience--the faculty and mid-level administrators. Through strategic planning, administrators can systematically set the future direction of an institution by defining goals and objectives to be achieved; identifying the significant policies guiding or limiting the proposed action; and developing the major action sequences that are needed to accomplish the defined goals within the set limits (Kanter, 1989; Quinn, Mintzberg and James, 1988). Failure often occurs when leaders substitute copy-cat strategies that concentrate on the "how tos" for a clearly articulated vision that communicates the "why."

## One More Possibility ?

Today, growing numbers of two- and four-year colleges experiment with total quality management. TQM's underlying philosophy of quality leads to systematically analyzing an organization's systems for variance, making decisions based on fact, consciously defining the organization's internal and external customers and actively seeking input from both. It drives out fear by encouraging organization members to risk making mistakes in order to learn more about the system. It removes organizational barriers by establishing clear and open lines of communication. It educates and retrains employees. It thrives on teamwork and interrelationships. In other words, TQM creates a structure conducive to never-ending, incremental improvement by building cooperative labor-management relations (Coate, 1990; Cornesky et al, 1990; Cornesky and others, 1991; Gitlow and Gitlow, 1987; Seymour, 1992).

Although subtle differences do exist, it appears that TQM closely resembles the approach taken within a shared culture. While the collaborative efforts of a shared culture implicitly recognize the contributions and concerns of many of the organization's stakeholders, TQM explicitly identifies both internal and external customers. Shared cultures promote decision making based on fact. TQM provides a slightly different set of analytic tools--flow charting and counting techniques--to aid an institution in searching its systems and processes for variance that detracts from quality.

Yet, philosophically, they remain very similar. Both attack the system, not the people within it, in the search for improvement and excellence. TQM seeks out a series of small wins that will add up to superior performance. Cross (1987) echoes the same sentiment when she says, "Thousands of small changes made in classrooms across the nation may well add up to more real reform of education than sweeping policies made far from the scene of the teaching/learning action."

## REFERENCES


Astin, H. S. and Leland, C. (1991). Women of influence, women of vision. San Francisco: Jossey-Bass, Inc.

Coate, L. E. (July 1990). Implementing Total Quality Management in a university setting. Oregon State University.

Cornesky, R. A. et al. (1990). Using Deming: Improving quality in colleges and universities. Madison: Magma Publications.

Cornesky, R. A., McCool, S., Byrnes, L. and Weber, R. (1991). Implementing Total Quality Management in higher education. Madison: Magma Publications.

Cross, K. P. (March 1987). The adventures of education in wonderland: Implementing education reform. Phi Delta Kappan. 496-502.

Elliott, D. C. (1992). Community college faculty behaviors impacting transfer student success: A qualitative study. Tempe, Arizona: Arizona State University, unpublished doctoral dissertation.

Gitlow, H. S. and Gitlow, S. J. The Deming guide to quality and competitive position. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1987.

Kanter, R. M. (1989). When giants learn to dance. New York: Simon and Schuster.

Kuh, J. D. and Whitt, E. J. The invisible tapestry: Culture in American colleges and universities. Washington, D.C.: Association for the Study of Higher Education, ASHE/ERIC Higher Education Report No. 1, 1988.

Lincoln, Y. S. and Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage Publications.

Manz, C. C. and Sims, H. P. Superleadership. New York: Berkley Books, 1989.

Miami-Dade Community College. (October 1988). Faculty excellence: Teaching/Learning. District Board of Trustees, Miami, FL.

Mintzberg, H. (1989). Mintzberg on management. New York: The Free Press.

Moomaw, W. E. (September 1984). Participatory leadership strategy, in Leadership roles of chief academic officers. Brown, D. J.(ed.) New Directions for Higher Education. No. 47, San Francisco: Jossey-Bass, Inc.

Murphy, B. (1992). The role of faculty involvement in improving the learning environment. Tempe, Arizona: Arizona State University, unpublished doctoral dissertation.

Phillips, D. T. (1992). Lincoln on leadership: Executive strategies for hard times. New York: Werner Books.

Quinn, J. B., Mintzberg, H. and James, R. M. (1988). Strategic process. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Richardson, R. C. (1992). Defining and achieving quality in teaching and learning: Report of a study funded by the Ford Foundation. Tempe, Arizona: Arizona State University.

Richardson, R. C. and Skinner, E. (1991). Achieving quality and diversity: Universities in a multicultural society. New York: American Council on Education/MacMillan Publishing.

Schein, E. H. (1985). Organizational culture and leadership. San Francisco: Jossey-Bass Publishers, Inc.

Seldin, P. (1990). How administrators can improve teaching. San Francisco: Jossey-Bass Publishers.

Senge, P. M. (1990). The fifth discipline--the art and practice of the learning organization. New York: Doubleday.

Seymour, D. (1992). On q-causing quality in higher education. New York: American Council on Education/MacMillan Publishing.

Spanbauer, S. J. (1987). Quality first in education...Why not? Using quality and productivity methods to improve schools. Appleton, Wisconsin: Fox Valley Technical College Foundation.

Vangsnes, D. (1992). Development of a community college faculty activities survey. Tempe, Arizona: Arizona State University, unpublished doctoral dissertation.

Whetten, D. A. (1984). Effective administrators: Good management on the college campus. Change. 16. 38-43.

Yin, R. K. (1989). Case study research: Design and methods. Newbury Park, California: Sage Publications.